

ABSTRACT OF THE DISCLOSURE

The invention concerns a software development tool for embedded computer systems, and is based on a repository of configurable, pre-programmed software components, together with associated tools for user selection and configuration of the components and a code generator for extracting relevant source code based on the configuration settings. Each software component, called embedded system infrastructure component (ESIC), is a self-contained object comprising a modular code base and associated configuration structure related to an infrastructure function in a hardware-independent, non-operating-system software infrastructure for an embedded computer system. For each ESIC, the configuration tool enables user configuration of the infrastructure function based on the configuration structure of the ESIC to match the requirements of the target application. For each ESIC, the code generator utilizes the configuration settings to extract source code for the infrastructure as a subset of the modular code base. This approach provides fast, efficient and flexible development of embedded system software infrastructures.

(Fig. 3)